

# ABSTRACT OF THE DISCLOSURE

A method for producing a high density inductor includes the steps of forming a coil having a spiral shape, sealing the coil in the interior of a core member, and forming a terminal electrode for allowing electric conduction to said coil on the outside of said core member. In this method, the coil is formed by repeating a process of forming a wire layer by means of a thin film forming process and a process of forming an additional wire layer on top of the wire layer by means of the thin film forming process to pile up the wire layers. With this production method, it is possible to form a coil with a high aspect ratio. In addition, the inductor is designed in such a way that the core member envelopes only the coil. With that design, it is possible to make the inductor compact.